

ABSTRACT

Reinforced material with ionic conduction, use thereof in electrodes and electrolytes

5 The invention relates to a solid material with ionic conduction, which can be used as an electrolyte or as a component of a composite electrode.

10 The material comprises a polymer matrix, at least one ionic species and at least one reinforcing agent. The polymer matrix is a solvating polymer optionally having a polar character, a non-solvating polymer carrying acidic ionic groups, or a mixture of a solvating or non-solvating polymer and an aprotic polar liquid. The ionic species is an ionic compound selected from salts and acids, said compound being in solution
15 in the polymer matrix, or an anionic or cationic ionic group fixed by covalent bonding on the polymer, or a combination of the two. The reinforcing agent is a cellulosic material or a chitin.